



URBAN CREEKS COUNCIL
1250 Addison Street, Suite 107-C - Berkeley, CA 94702
510.540.6669 - www.urbancreeks.org



July 14, 2006

To: California State Water Resources Control Board

Re: Comments on proposed "Total Chlorine and Chlorine-Produced Oxidants Policy of California"

The Urban Creeks Council opposes the proposed policy, "Total Chlorine and Chlorine-Produced Oxidants Policy of California", and urges you not to replace your current policy on chloramines with a policy that is less protective of creeks and the aquatic life they support.

It is common knowledge in the water, environmental and regulatory communities that chloramines, when introduced into a creek environment dramatically and adversely impact aquatic organisms. Urban Creeks Council staff have witnessed and documented releases of chloraminated water into East Bay creeks.

Incidents that Urban Creeks Council has documented and reported include:

- June 1, 2005: Urban Creeks Council staff witnessed a devastating fish kill in Strawberry Creek from a confirmed EBMUD main that flowed unabated into the creek for at least twenty-four hours. Testing of the creek water confirmed that the water was nearly fully chloraminated. We received assistance from the SFBRWQCB and the Department of Fish and Game. Our letter dated December 2, 2005 detailing this incident is attached.

- October 8, 2005: Urban Creeks Council documented a water main break on Codornices Creek. This incident was also documented in a letter to the SFBRWQCB. This past spring, mature steelhead trout were observed attempting to spawn in Codornices Creek. Their progeny, now small parr, are currently developing into smolts in the waters of the creek. A water main break such what occurred in October 2005 could devastate Codornices Creek's entire fragile population of this threatened species. Our letter dated December 8, 2005 detailing this incident is attached.

In light of the devastating impact chloramines can have on small streams, it is imperative not to overlook the very real threat they pose to ecosystems, creeks and recovering populations of threatened species they support.

The San Francisco Bay Regional Water Board is involved in a forward-moving collaborative process with EBMUD to develop plans to control chloramines discharges beyond the nominally successful current use of BMPs. The proposal to weaken regulation of chloramines takes the SF Bay Region backward in protecting and restoring urban creeks and recovering populations of aquatic organisms. The SFBRWQCB needs the authority to continue to collaborate with water agencies to improve chloramine monitoring, response and neutralization.

Technology exists to document, monitor, and neutralize releases of their chloraminated water. Though methods of accurately field-testing water for chloramines exist, it is evident that new methods must be developed to respond to chloramine contamination and to neutralize chloraminated water spills before they cause large-scale damage to the aquatic life in our streams. The SFRWQCB is a critical player in working with water providers and environmental groups to develop improved BMPs and responses to spills. The adoption of the proposed "Total Chlorine and Chlorine-Produced Oxidants Policy of California" would hamper these efforts.

The Urban Creeks Council urges you to reject the proposed "Total Chlorine and Chlorine-Produced Oxidants Policy of California".

I look forward to working with you to preserve, protect and restore urban creeks.
Sincerely,

Abigail Fateman
Chair, Board of Directors
Urban Creeks Council

December 2, 2005

EBMUD
375 11th. Street
Oakland, CA 94607
Attn. General Manager

To Whom It May Concern,

The purpose of this letter is to document the events which took place on Strawberry Creek in Berkeley, CA on June 1, 2005. On this date Urban Creeks Council learned of a discharge of water from a EBMUD pipe which led to the death of many fish (Sacramento Suckers) on Strawberry Creek. Following is a recount of the events which took place and the agencies and personnel involved.

At approximately 1:00 PM, Scott Stein, a resident of Berkeley who lives on Acton Crescent, alerted our office that he noticed numerous dead fish floating in Strawberry Creek, in his backyard. Mike Vukman and I went to Mr. Stein's property, witnessed the dead fish (approximately 30), took one fish sample and took a water sample.

I immediately notified the California Department of Fish and Game, The San Francisco Bay Area Water Quality Control Board hotline, Berkeley Toxics, and The University of California at Berkeley in an effort to find out what was causing the fish kill and to resolve the cause.

Karl Hans, Senior Environmental Scientist at the University of California immediately conducted a visual inspection Strawberry Creek on campus and found that the "creek looked normal and undistressed fish were observed", this indicated to him that the cause of the fish mortality was west (down stream) of campus. Mr. Hans then proceeded to Strawberry Creek Park (east of Bonar street) where he found the water to be "somewhat silty", leading him to suspect a water main break. Using a Hach DPD Total Chlorine Reagent for 25 ml sample powder pillow, he tested the water and found it to be almost fully chlorinated. Mr. Hans's conclusion was "the cause of fish mortality was exceedance of the lethal exposure time to chloramines".

Roxanne Bower, Warden, California Department of Fish and Game responded to our call and visited our office on June 2, 2005. Ms. Bower took our fish and water sample and informed us that the fish species was Sacramento Sucker *Catostomus occidentalis*

(Ayres). According to Roxanne Bower, DFG did not test a water sample but have kept the dead fish in storage at Yountville as evidence.

Andy Block, City of Berkeley Department of Toxics Management, was notified of this incident and he responded by searching the city and finding a broken water pipe in the city (east of Sacramento Ave.). Mr. Block reported to me over the phone that he estimated the flow rate to be 5gpm. He reported this break to EBMUD who then reported to the site, fixed the break and stopped the water flow into the creek. The repair occurred on June 2, 2005, so as far as we know the water was allowed to flow into the creek for at least one day, likely longer, and have a significant impact on the ecosystem of Strawberry Creek.

The San Francisco Bay Area Water Quality Control Board never responded to my two calls to their hot-line.

These are the events which occurred, to the best of my memory, surrounding this incident. The impacts to such a small waterway were severe and lasting. If not for the watchful eye of a concerned resident it is hard to tell how long that the chloramine-contaminated water from this break may have been allowed to flow into Strawberry Creek.

At Urban Creeks Council, we spend all of our time working to protect and restore creeks like Strawberry Creek in the Bay Area. Much of our motivation in doing our work is derived for the desire to preserve the remaining fish that exist in these small creeks. It is inconceivable to think that one break of one pipe can have such a huge negative impact, undo years of planning and hard work, and potentially wipe out an entire population of fish. It is our hope that EBMUD will be willing to work with us in forming strategies to ensure that this type of incident does not occur in the future.

Sincerely,

Steven W. Donnelly

Executive Director

Urban Creeks Council

Cc David Richardson (Member, Board of Directors)
EBMUD
375 11th. Street
Oakland, CA 94607

Bruce Wolfe
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, suite 1400
Oakland, CA 94612

December 8, 2005

EBMUD
375 11th Street
Oakland, CA 94607
Attn. General Manager

To Whom It May Concern

This letter is to document recorded flows in Codornices Creek on October 8, 2005. On this date a water main break occurred at 1140 Shattuck Avenue according to EBMUD's report by Robert Newman.

This break caused a significant influx of water into Codornices Creek. A stream gage at Cornell Street, maintained by Friends of Five Creeks with support from the Urban Creeks Council, records stage height, flow, water temperature, and specific conductance every fifteen minutes. October 8th stream gage data shows that stream flow more than doubled between 12:00 and 12:15 PM, jumping from 0.522 cfs to 1.288 cfs. Flow peaked at 1:00 PM at 1.487 cfs (667 gpm) and then continued to recede to baseflow. Gage data indicates that the net additional flow between 12:00 and 8:30 PM was approximately 100,000 gallons. Enclosed are two graphs illustrating the stream flow data. (For future reference, "real time" gage data can be accessed online at <http://www.balancehydrologics.com/codornices/creek/index.php>.)

EBMUD's response and treatment, as described within the aforementioned report, on October 8 was timely and efficient. We applaud your action. Fortunately, no aquatic life was observed to be harmed during the event. However, we are concerned about the possible impacts of future breaks; breaks that may be larger or go unnoticed or untreated for longer periods of time and cause significant damage to creek life.

As you know chloramines are toxic to the majority of aquatic organisms. Codornices Creek is home to a healthy macrobenthic invertebrate community, frogs, and fish. Codornices also supports a remnant population of *Oncorhynchus mykiss*. *O. mykiss*, or rainbow/steelhead trout, are a member of the salmonid family and are listed as a threatened species.

Numerous restoration projects have occurred within Codornices Creek as well as the ongoing Codornices Creek Watershed Restoration Action Plan. This plan seeks to improve *O. mykiss* habitat in order to sustain a healthy, permanent population. Our concern is that the costly efforts

of the community and UCC can be destroyed by the negative impacts of water main breaks and chloramines.

Thank you for realizing the responsibility we have to our waterways and the impacts we impose upon them. We hope that EBMUD continues to develop and adhere to best management practices in order to minimize the effect of chloramines in our environment.

Sincerely

Emma B.L. Gutzler
Restoration Coordinator
Urban Creeks Council

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